

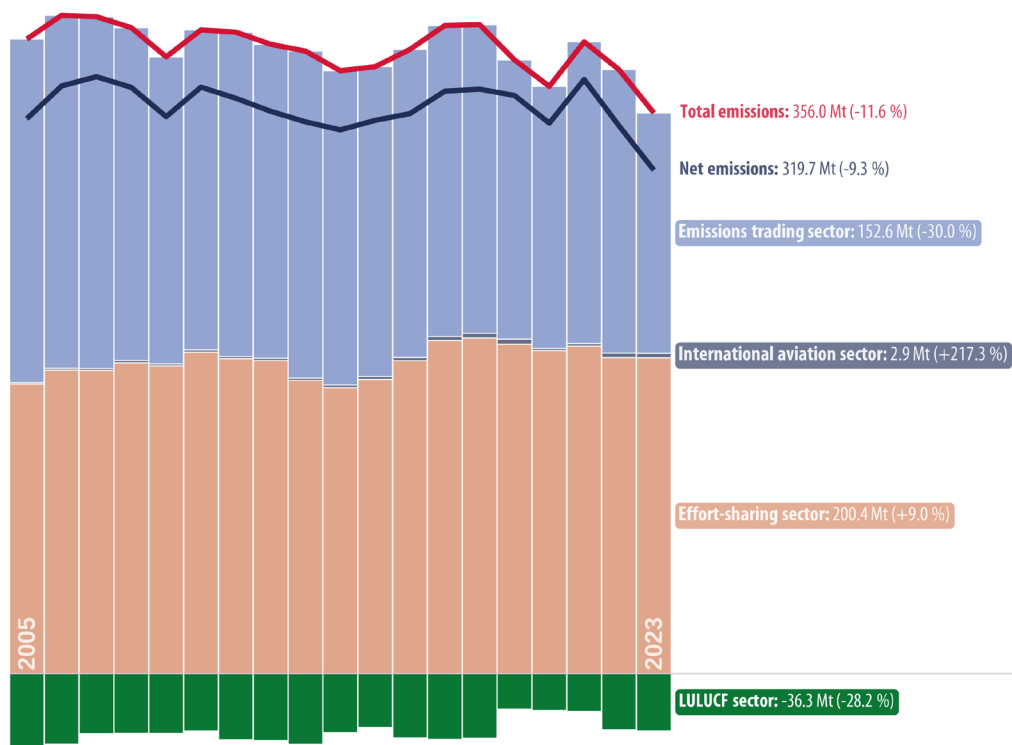
## Poland's climate action strategy

Poland does not have a national climate law or a strategy to become climate-neutral. However, it is bound by the European Climate Law and other EU legislation that obliges Member States to reduce greenhouse gas (GHG) emissions in some sectors.

Poland accounts for 10.7 % of the EU's net GHG emissions, and achieved a net emissions reduction of 9.3 % in the years 2005 to 2023 – significantly lower than the EU average of 30.5 % over the same period (Figure 1). Emissions under the EU emissions trading system (ETS), covering mainly energy-intensive sectors, aviation and maritime transport, decreased by 30 %. Carbon removals in the LULUCF (land use, land-use change and forestry) sectors went down by 28.2 %. In the effort-sharing sectors (domestic transport without aviation, buildings, agriculture, small industry and waste) increased by 9 %. In August 2023, Poland updated its recovery and resilience plan and introduced a REPowerEU chapter. It submitted its [draft](#) updated national energy and climate plan (NECP) on 1 March 2024 (only the scenario with existing measures). The European Commission [assessed](#) the partially updated plan on 26 April 2024, and deemed the existing measures insufficient to meet the 2030 targets.

In a 2023 Eurobarometer [survey](#), 28 % of Poles, compared with a 46 % EU average, identified climate change as one of the four most serious problems facing the world. Almost half expect national government (46 %) and/or the EU (43 %) to tackle climate change, while 17 % find it to be a personal responsibility.

Figure 1 – Poland's greenhouse gas emissions in million tonnes (Mt), 2005–2023



Data source: European Environment Agency ([EEA](#)), 2024.

*This briefing is one in a series covering all EU Member States.*

### EPRS | European Parliamentary Research Service

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## Poland's starting point

Poland does not have a national climate law or a long-term strategy to become climate-neutral. The [social contract](#) for the mining industry, signed in May 2021, sets the date of closure of the last coal mine in Poland to 2049. The [Energy policy of Poland until 2040](#) strategy, adopted in 2021, sets out a plan for energy transition based on gradual reduction of the dependence on fossil fuels, as well as expansion of renewable and nuclear energy. A strategic [adaptation plan](#) for sectors and areas affected by climate change until 2020 (with a perspective for 2030) dates back to 2013.

Between 2005 and 2023, the country achieved significant [emissions reductions](#) in waste management (-68.7 %), LULUCF (-28.2 %) and energy industries (-26.4 %), in contrast with more modest reductions in manufacturing (-20.6 %) and industrial processes (-11.3 %). Emissions grew in agriculture (+4.9 %) and transport (+95 %).

Poland's per capita emissions are above the EU average, reaching 9.68 tonnes of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) in 2023 – an 8.2 % decrease since 2005 (compared with a 32.4 % reduction at EU level). However, the Polish economy's carbon intensity fell by 54.5 % between 2005 and 2023 (compared with a 44.4 % EU average). Poland [achieved](#) its national emissions target under the EU Effort-sharing Decision for the 2013–2020 period and its 2020 target for renewable energy in consumption under the Renewable Energy Directive. Under the Energy Efficiency Directive, it met its indicative 2020 target for final energy consumption but not that for primary energy consumption.

Poland received a 'low' rating in the 2025 [Climate Change Performance Index](#) (CCPI) in all categories assessed: GHG emissions, renewable energy, energy use, and climate policy. The CCPI ranks countries based on their climate protection performance using primarily quantitative data, with experts providing qualitative evaluation of a country's forward-looking climate policies.

## Climate action governance

Poland's climate policy is governed at national level by the [climate and environment ministry](#). The ministry is responsible for adaptation to climate change and implementing various programmes in sectors such as energy, electromobility and buildings. It also organises the [Youth Climate Council](#). The National Centre for Emissions Management ([KOBIZE](#)), supervised by the ministry, runs a national database on GHG emissions and implements relevant commitments resulting from EU law, including ETS and reporting obligations.

The national strategic [adaptation plan](#) for sectors and areas affected by climate change until 2020 (with a perspective for 2030) identifies the intensification of extreme weather events, such as heavy rainfall, floods, heatwaves, draughts and hurricanes, as the biggest threats. The most vulnerable sectors and areas include: water management; biodiversity; forestry; energy; agriculture; transport; coastal, mountain and urban areas; construction; and health. The plan was adopted in 2013 and has not been amended since. Moreover, it only covers adaptation, without tackling mitigation (i.e. emissions reduction).

While a national climate neutrality strategy is lacking, some Polish regions and cities have adopted such strategies. For instance, Wielkopolska has a [strategy](#) for climate neutrality by 2040, focusing on reducing GHG emissions, strengthening energy efficiency, and increasing renewable energy. Moreover, five Polish cities (Łódź, Kraków, Rzeszów, Warszawa/Warsaw and Wrocław) are part of the EU mission for [climate-neutral and smart cities](#), aimed at developing climate city contracts with a plan for climate neutrality across different sectors.

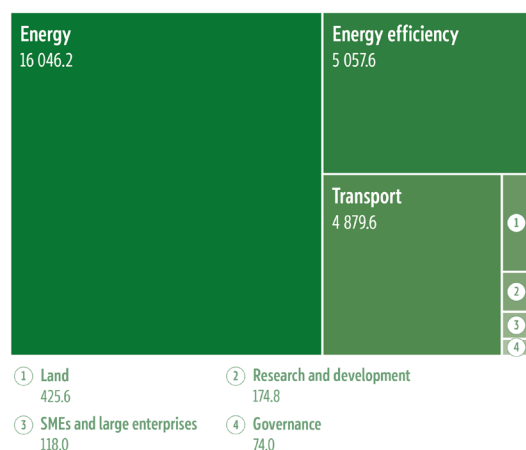
## Climate action in the national recovery and resilience plan

Poland submitted its [national recovery and resilience plan](#) (NRRP) to the Commission in May 2021, and updated it in August 2023. EU support for the amended plan (including the [REPowerEU chapter](#)) amounts to €59.8 billion (this includes €25.3 billion in grants and €34.5 billion in loans). An allocation of 46.6% of the plan will support the green transition, thus exceeding the 37 % target set

under the Recovery and Resiliency Facility. The updated plan received a positive [assessment](#) from the Commission (highest possible rating for 12 out of the 13 assessment criteria).

The biggest components in the [Polish NRRP](#) (Figure 2) are dedicated to REPowerEU (42 % of the total allocation) and green energy and energy intensity reduction (26 %). Key measures include improving conditions for [energy communities](#), streamlining permitting for renewable energy projects and accelerating building renovations. Other measures include funding offshore wind energy infrastructure, eliminating bottlenecks for electricity imports, development of green hydrogen technologies, and investment in green and smart mobility.

Figure 2 – NRRP climate dimension (€ million)

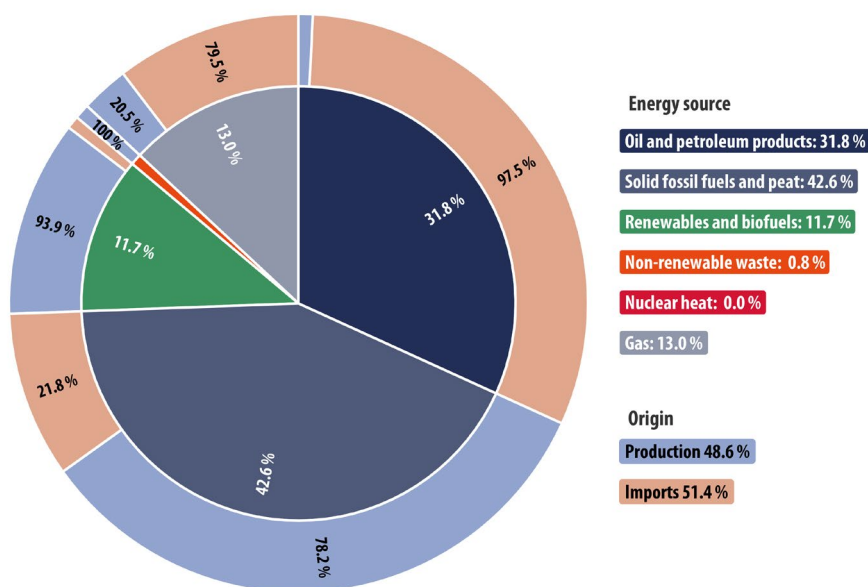


Data source: [European Commission](#), 2023; graphic by Lucille Killmayer, EPRS.

## Energy situation

Poland is heavily dependent on fossil fuels, particularly coal (Figure 3). In 2022, the share of coal in electricity was [70.7 %](#) (early estimates for 2023 suggest a drop to [63 %](#)). The share of renewables has been steadily growing, and reached 20.6 % of the electricity mix in 2022. Despite large coal deposits in the country, Poland imports about [20 %](#) of the coal it uses; this is due to the high cost of domestic production and the demand for a specific quality and types of coal not widely available domestically. Poland has minimal oil and gas deposits, and about 97 % of the oil and 78 % of the gas it consumes is met by [imports](#). As part of its efforts to compensate for the cut-off of Russian gas in April 2022, Poland invested in alternative gas infrastructure. The LNG (liquefied natural gas) [terminal](#) in Świnoujście (operating since 2016) has been expanded, and work is under way to open an FSRU (floating storage regasification unit) terminal in Gdańsk in 2027–2028. The [Baltic Pipe](#), launched in 2022, transports gas from Norway via Denmark to Poland. Moreover, a [hydrogen strategy](#) has been in place since 2021, with the ambition to achieve 2 gigawatts (GW) of installed low-carbon hydrogen production capacity by 2030. In the effort to diversify the Polish energy mix, Poland adopted a [nuclear power programme](#) that envisages opening two nuclear power plants in the 2030s.

Figure 3 – Energy mix and import dependency, 2022

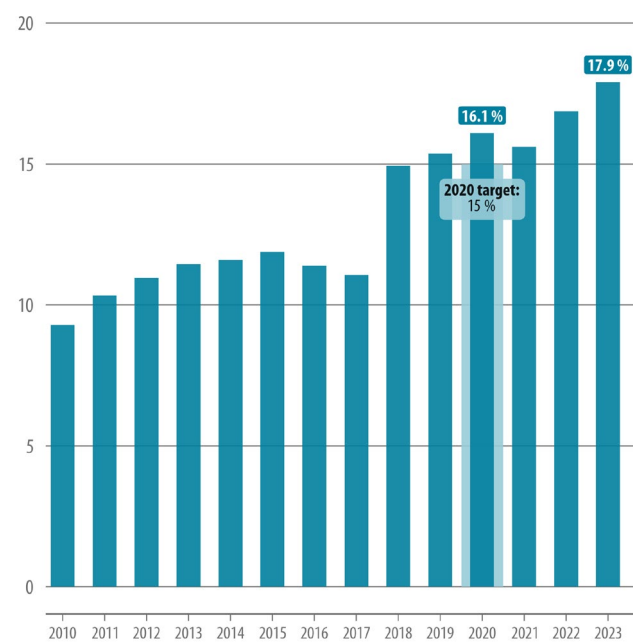


Data source: Eurostat ([nrg\\_bal\\_sd](#)), 2024.

Poland slightly [exceeded](#) its 2020 target for renewable energy in consumption (Figure 4). The draft updated [NECP](#) of March 2024 declares the ambition to achieve a 29.8 % share of RES in gross final energy consumption by 2030 (up from 21-23 % in the 2019 [NECP](#) and compared with [16.9 %](#) in 2022). However, the Commission's [assessment](#) of the draft updated NECP points out that this is still below the calculated national contribution of 32 % towards the 2030 EU-wide target. The main sources of renewable energy are wind, solar and biomass, with solar being the fastest-growing renewable energy source ('[solar revolution](#)'). There is also significant [potential](#) for wind energy, with the recent liberalisation of onshore wind (halted by restrictive [legislation](#) in force from 2016 to 2023), and the launch of the largest offshore wind farm in Poland ([Baltica](#)) planned for 2027.

[Energy policy of Poland until 2040](#) sets the path for Poland's energy transition, with targets such as at most 56 % of coal and at least 32 % of renewables in electricity production by 2030, a 30 % GHG emissions reduction by 2030 (compared with 1990), and specific targets for wind and photovoltaic (PV) installed capacity for 2030 and 2040: 5.9 GW in 2030 and 11 GW in 2040 for offshore wind, and 5-7 GW in 2030 and 10-16 GW in 2040 for solar PV.

Figure 4 – Renewable energy share in final energy consumption



Data source: Eurostat ([nrg\\_ind\\_ren](#)), 2024.

## Sectoral challenges and strategies

The Commission's [assessment](#) of the Polish draft updated NECP points out that the scenario with existing measures would reduce emissions in the effort-sharing sectors by 14.1%, which means falling short of the 2030 target set in the Effort-sharing Regulation by 3.6 percentage points (Figure 5 below). The 2024 [country report](#) on Poland highlights the need to reduce carbon emissions from buildings, in particular the heavily coal-dependent district heating systems. This is echoed in the Council's 2024 [country-specific recommendations](#), which urge Poland to accelerate the phase-out of fossil fuels in the district heating sector by shifting to renewable energy.

Examples of nation-wide actions to support the transition in energy use in buildings include the '[my electricity](#)' programme, which provides subsidies for solar panels, heat pumps and energy storage facilities, and the [clean air](#) programme, with subsidies for improving the energy efficiency of buildings (e.g. by replacing coal-based heaters and improving insulation). These programmes have already been in place for several years, and have had multiple editions. In 2022, the '[my heating](#)' programme was added, offering subsidies for heat pumps in stand-alone houses.

Figure 5 – Poland's emissions under the Effort-sharing Decision/Regulation



Data source: [EEA](#), 2023.

The 2024 country report also points to the need for decarbonising the transport sector, given that emissions from road transport almost doubled between 2005 and 2022, representing 34.4 % of all emissions in the effort-sharing sectors. Uptake of electric vehicles is very slow, and investment in a network of charging stations is needed. The draft updated NECP includes measures supporting the development of zero-emission urban transport, deployment of a public recharging infrastructure for electric vehicles, and expansion of the rail network. An example is the '[my electric car](#)' programme, which subsidises the purchase or leasing of electric vehicles for individuals and companies.

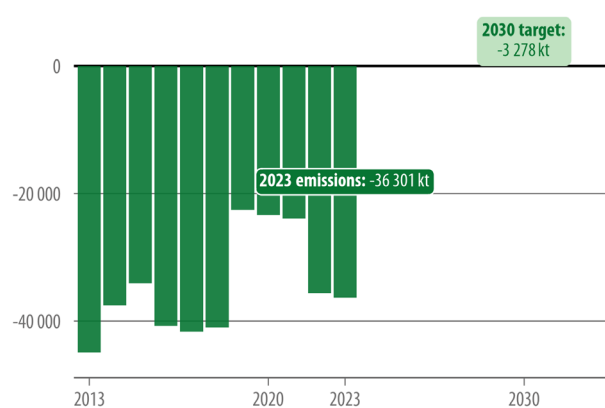
In terms of emissions reduction from industry, Poland's policies focus mainly on strengthening energy efficiency and increasing renewable energy. The draft updated NECP highlights the potential for expanding green hydrogen, biomethane and the use of CCUS (carbon capture, utilisation and storage) installations in hard-to-abate sectors such as cement, steel and chemical industries. The NECP projects the share of renewables in electricity to 50.1 % in 2030 and 59.1 % in 2040, owing to their dynamic growth.

The Polish draft updated NECP stresses limited opportunities for emissions reduction in agriculture as a result of food security concerns. Some of the proposed measures include turning organic waste into biomethane, optimising the use of fertilisers, boosting organic farming activities, and increasing the use of renewable energy in agriculture with the [Agroenergy](#) programme. However, the NECP still projects a further increase of agriculture emissions by 2030.

By 2030, Poland **must** reduce its LULUCF emissions by 3 278 kilotonnes of CO<sub>2</sub> equivalent (ktCO<sub>2</sub>e) compared with its average emissions in 2016, 2017 and 2018 (where accounting adjustments may occur). In 2020, this baseline was -34 820 ktCO<sub>2</sub>e (see Figure 6). Forests are currently the largest

carbon sink in Poland, but CO<sub>2</sub> absorption capacity is decreasing because of the age of forest stands and climate change impacts. The NECP proposes several actions designed to improve forest management and increase carbon sequestration in agriculture – with the caveat that the sink potential in the agricultural sector is relatively small and must be balanced with food security.

Figure 6 – LULUCF emissions in Poland



Data source: [EEA](#) (2030 target is based on 2016-2018 baseline), 2024.

According to the Commission's [assessment](#), despite the proposed policies and measures, net removals are projected to decrease significantly by 2030, so that Poland will fall significantly short of its 2030 LULUCF target.

On 5 September 2024, the Polish government [presented](#) the newly prepared NECP with an additional measures scenario. The new 2030 targets include a 50.4 % emissions reduction and a 32.6 % share of renewables in gross final energy consumption. Specific shares of renewables are also set for electricity (56.1 %), heating and cooling (35.4 %), and transport (17.7 %). The new scenario projects a 22 % share of coal in electricity generation. The necessary investment to implement this plan is estimated at PLN 792 billion (€185 billion) in the 2026–2030 period. The plan includes 149 actions focusing in particular on energy efficiency, research and development, energy security, air quality, decarbonisation of key sectors (agriculture, electricity generation, heating, transport and industry), and boosting LULUCF's role. This new version still has to be adjusted in line with the results of a public consultation and adopted by the government before being submitted to the Commission.

## Latest policy developments

In the coming months, updates of several key strategic documents are expected. The submission of the fully updated Polish NECP is planned for early 2025; meanwhile, the Commission launched an [infringement procedure](#) against Poland and 12 other Member States that missed the NECP deadline. The updates of 'Energy Policy of Poland until 2040' and the Polish nuclear power programme are expected around the same time. Moreover, the climate ministry and the industry ministry are also working on a new programme, 'Poland's energy transition', and a 'heating decarbonisation strategy' is under way, as the sector is a [priority area](#) for transition from fossil fuels to low-emission sources.

The first draft of a Polish [climate law](#) was presented by non-governmental organisation Client Earth in April 2023. It proposed a 61% emissions reduction target by 2030 and climate neutrality by 2050. It also suggested a 1 % gross domestic product allocation to climate (up from the current 0.6 %), an independent Climate Protection Council to advise the government, as well as 'emissions budgets' and adaptation and emissions reduction plans at national and regional levels.

On the government side, work is currently ongoing on the [national long-term strategy](#) required under the [Governance Regulation](#), in addition to the NECP, to outline a comprehensive vision for Poland's transition to climate neutrality by 2050. The strategy is expected to be published in 2025.

## MAIN REFERENCES

European Commission, [factsheet](#) on highlights of the Commission's assessment of Poland's draft updated National Energy and Climate Plan, 2024.

Republic of Poland, [Poland – Draft updated NECP 2021–2030](#), 2024.

World Bank Group, [Poland Country Climate and Development Report](#), 2024.

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